

AMENDMENT TO THE CLAIMS

1. (Currently Amended) A system for multimedia on demand, the system comprising:

- a plurality of buses comprising a media bus, a network bus, and a system data bus;
- a plurality of tuners and demodulators connected to the system data bus and connected to an analog-to-digital converter, the plurality of tuners and demodulators sending an analog information signal to the analog-to-digital converter, and the analog-to-digital converter outputting digital information signal based at least in part on the analog information signal;

- the plurality of tuners and demodulators also connected to a decryption circuit that decrypts an encrypted information signal received from the plurality of tuners and demodulators and produces a decrypted information signal;

- a decoder circuit connected to the decryption circuit that converts the decrypted information signal from one format to a second format;

- a cipher/decipher circuit connected to the decoder circuit and connected to the analog-to-digital converter that deciphers the digital information from the analog-to-digital converter and deciphers the converted decrypted information signal from the decoder circuit;

- the cipher/decipher circuit connected to the media bus and sending deciphered information signals to the media bus;

- the system data bus connected to the media bus and configured to only receive the deciphered information signals from the media bus, the system data bus unable to send information to the media bus;

- a video overlay processor connected between the system data bus and the media bus, the video overlay processor receiving the deciphered information signals from the media bus and sending video overlay signals to the system data bus;

- the network bus connected to the system data bus and receiving system data bus information and the video overlay signals communicated along the system data bus;

a mass storage device connected to the system data bus and storing the system data bus information and the video overlay signals;

circuitry managing the tuners and demodulators to allow recording of content to the mass storage device while processing other content for output to provide a rewind function for the content;

a data switch connected to the network bus, the data switch receiving the system data bus information and the video overlay signals and sending the system data bus information and the video overlay signals to one or more switch ports;

a processor connected to the system data bus; and
memory coupled to the system data bus,

wherein a browser-based graphical user interface is stored in the memory, the processor automatically downloads and stores content items to the memory, the processor receives an instruction to retrieve the graphical user interface from the memory, and the processor sends the graphical user interface to a client device with the graphical user interface describing the content items stored in the memory.

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4. (Previously Presented) The system of claim 1, wherein the processor receives a command from the client device that was transmitted from a remote control.
5. (Previously Presented) The system of claim 1, wherein the processor retrieves another instruction from the memory that is associated with the command from the remote control.

6. (Previously Presented) The system of claim 1, wherein the processor includes instructions in the graphical user interface that control the system from the client device.
7. (Previously Presented) The system of claim 1, further comprising a data table stored in the memory that associates a content identifier to a usage indicator for each content item, the content identifier identifying each content item automatically downloaded to the memory, and the usage indicator indicating that a content item has been played.
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17. (Currently Amended) A computer readable medium storing processor executable instructions for performing a method of providing multimedia on demand, the method comprising:

connecting a plurality of tuners and demodulators to a system data bus and to an analog-to-digital converter, the plurality of tuners and demodulators sending an analog information signal to the analog-to-digital converter, and the analog-to-digital converter outputting digital information signal based at least in part on the analog information signal;

connecting the plurality of tuners and demodulators to a decryption circuit that decrypts an encrypted information signal received from the plurality of tuners and demodulators and produces a decrypted information signal;

connecting a decoder circuit to the decryption circuit that converts the decrypted information signal from one format to a second format;

connecting a cipher/decipher circuit to the decoder circuit and to the analog-to-digital converter that deciphers the digital information from the analog-to-digital converter and deciphers the converted decrypted information signal from the decoder circuit;

connecting the cipher/decipher circuit to a media bus and sending deciphered information signals to the media bus;

connecting the system data bus to the media bus and configuring the system data bus to only receive the deciphered information signals from the media bus, the system data bus unable to send information to the media bus;

connecting a video overlay processor between the system data bus and the media bus ;

receiving the deciphered information signals from the media bus at the video overlay processor ~~receiving the deciphered information signals from the media bus and sending video overlay signals to the system data bus;~~

superimposing a first audio-video signal over a second audio-video signal by the video overlay processor to produce a superimposed signal;

sending the superimposed signal to the system data bus;

connecting a network bus to the system data bus and receiving system data bus information and the superimposed signal ~~video overlay signals~~ communicated along the system data bus;

connecting a mass storage device to the system data bus and storing the system data bus information and the superimposed signal ~~video overlay signals~~;

connecting a data switch to the network bus, the data switch receiving the system data bus information and the superimposed signal ~~video overlay signals~~ and sending the system data bus information and the superimposed signal ~~video overlay signals~~ to one or more switch ports;

connecting a processor ~~connected~~ to the system data bus; and

connecting memory to the system data bus,

processing an instruction to automatically receive a first multimedia content item at a transmission rate that is less than a real time transmission rate in bytes per second;

storing the first multimedia content item;

modifying a data table to include a first multimedia content item identifier, the first multimedia content item identifier corresponding to the first multimedia content item;

managing the tuners and demodulators to allow recording of content to the mass storage device while processing other content for output to provide a rewind function for the content;

sending a multimedia usage report, the multimedia usage report based at least in part on the data table;

storing a browser-based graphical user interface in the memory;

automatically downloading and storing content items to the memory;

receiving an instruction to retrieve the graphical user interface from the memory;

and

sending the graphical user interface to a client device with the graphical user interface describing the content items stored in the memory,

wherein the deciphered information signals communicate from the media bus, to the system data bus, and to the network bus for routing by the data switch,

wherein the video overly signals communicate from the video overlay processor, to the system data bus, and to the network bus for routing by the data switch, and

wherein data switch information from the data switch communicates from the network bus to the system data bus, but the data switch information is prevented from communicating to the media bus.

18. (Previously Presented) The computer readable medium of claim 17, further comprising instructions for receiving a command from the client device that was transmitted from a remote control.
19. (Previously Presented) The computer readable medium of claim 17, further comprising instructions for retrieving another instruction from the memory that is associated with the command from the remote control.
20. (Previously Presented) The computer readable medium of claim 17, further comprising instructions in the graphical user interface that control a residential gateway from the client device.
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23. (Previously Presented) The computer readable medium of claim 17, further comprising instructions for storing a data table stored in the memory that associates a content identifier to a usage indicator for each content item, the content identifier identifying each content item automatically downloaded to the memory, and the usage indicator indicating that a content item has been played.
24. (Previously Presented) The computer readable medium of claim 23, further comprising instructions for storing a usage indicator for each content item that indicates when a content item has been played.

25. (Previously Presented) The computer readable medium of claim 17, further comprising instructions for accessing a profile to determine the content items stored in the memory.
26. (Currently Amended) A method for providing multimedia-on-demand, the method comprising:

connecting a plurality of tuners and demodulators to a system data bus and to an analog-to-digital converter, the plurality of tuners and demodulators sending an analog information signal to the analog-to-digital converter, and the analog-to-digital converter outputting digital information signal based at least in part on the analog information signal;

connecting the plurality of tuners and demodulators to a decryption circuit that decrypts an encrypted information signal received from the plurality of tuners and demodulators and produces a decrypted information signal;

connecting a decoder circuit to the decryption circuit that converts the decrypted information signal from one format to a second format;

connecting a cipher/decipher circuit to the decoder circuit and to the analog-to-digital converter that decipheres the digital information from the analog-to-digital converter and decipheres the converted decrypted information signal from the decoder circuit;

connecting the cipher/decipher circuit to the media bus and sending deciphered information signals to the media bus;

connecting the system data bus to the media bus and configuring the system data bus to only receive the deciphered information signals from the media bus, the system data bus unable to send information to the media bus;

connecting a video overlay processor between the system data bus and the media bus [,.];

~~the video overlay processor receiving the deciphered information signals from the media bus at the video overlay processor and sending video overlay signals to the system data bus;~~

superimposing a first audio-video signal over a second audio-video signal by the video overlay processor to produce a superimposed signal;

sending the superimposed signal to the system data bus;

connecting a mass storage device to the system data bus and storing the system data bus information and the superimposed signal ~~video overlay signals~~;

connecting a network bus to the system data bus and receiving system data bus information and the superimposed signal communicated along the system data bus;

connecting a data switch to the network bus, the data switch receiving the system data bus information and the superimposed signal ~~video overlay signals~~ and sending the system data bus information and the superimposed signal ~~video overlay signals~~ to one or more switch ports;

connecting a processor ~~connected~~ to the system data bus; and

connecting memory to the system data bus,

processing an instruction to automatically receive a first multimedia content item at a transmission rate that is less than a real time transmission rate in bytes per second;

storing the first multimedia content item;

modifying a data table to include a first multimedia content item identifier, the first multimedia content item identifier corresponding to the first multimedia content item;

managing the tuners and demodulators to allow recording of content to the mass storage device while processing other content for output to provide a rewind function for the content;

sending a multimedia usage report, the multimedia usage report based at least in part on the data table;

storing a browser-based graphical user interface in the memory;

automatically downloading and storing content items to the memory;

receiving an instruction to retrieve the graphical user interface from the memory;

and

sending the graphical user interface to a client device with the graphical user interface describing the content items stored in the memory,

wherein the deciphered information signals communicate from the media bus, to the system data bus, and to the network bus for routing by the data switch,

wherein the superimposed signal ~~video overlay signals~~ communicates from the video overlay processor, to the system data bus, and to the network bus for routing by the data switch, and

wherein data switch information from the data switch communicates from the network bus to the system data bus, but the data switch information is prevented from communicating to the media bus.

27. (Previously Presented) The method of claim 26, further comprising:

receiving a command from the client device that was transmitted from a remote control;

retrieving another instruction from the memory of the residential gateway that is associated with the command from the remote control.

28. (Previously Presented) The method of claim 26, further comprising including instructions in the graphical user interface that control a residential gateway from the client device.
29. (Previously Presented) The method of claim 26, further comprising a data table stored in the memory that associates a content identifier to a usage indicator for each content item, the content identifier identifying each content item automatically downloaded to the memory, and the usage indicator indicating that a content item has been played.
30. (Previously Presented) The method of claim 26, further comprising storing a usage indicator for each content item that indicates when a content item has been played.

31. (Previously Presented) The method of claim 30, further comprising including the usage indicator in the graphical user interface for each content item stored in the memory.
32. (Previously Presented) The method of claim 26, further comprising accessing a profile to determine the content items stored in the memory.
33. (Previously Presented) The method of claim 26, further comprising authenticating access to the content items using a smart card reader.
34. (Previously Presented) The method of claim 26, wherein sending the graphical user interface to the client device comprises sending the graphical user interface to a set top box.
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